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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	CC Docket No. 94-102

COMMENTS OF AMERITECH MOBILE COMMUNICATIONS, INC.

Ameritech Mobile Communications, Inc. (Ameritech), by its attorneys, respectfully submits these Comments in opposition to the "strongest signal" proposal filed by the Ad Hoc Alliance for Public Access to 911 (Alliance) on September 17, 1998 in the captioned docket.

If adopted, the Alliance proposal would increase the potential liability faced by analog cellular carriers for not transmitting calls, while increasing the costs borne by equipment manufacturers without providing any assurance that benefits will accrue to end users attempting to make 911 calls. The liability issue is of the utmost importance to Ameritech Mobile Communications, Inc. Ameritech has requested the Commission to grant immunity from liability or, in the alternative, to state that carriers are not required to deploy Phase I wireless E911 services unless: (a) the state statutes provide immunity from liability; or (b) the cost of insurance is funded through the state cost recovery mechanism.[1] To date, the Commission has

[1] Comments of Ameritech, Aug. 14, 1998, at 2-5; see also Petition for Partial Reconsideration of Ameritech, Sept. 3, 1996, at 10-15; Reply Comments and Written Ex Parte Presentation of Ameritech, April 1, 1998, at 2-5.; Petition for Partial

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declined to grant immunity from liability,[2] and Ameritech's most recent request is pending. Ameritech therefore opposes the Alliance's proposal.

These issues are addressed in the context of each of the four provisions of the Alliance's proposal:

- The proposal applies only to new analog cellular equipment;
- The proposal would require those handsets to be able to measure the signal strength being received, and if below -80 dBm, switch to another cellular carrier;
- The proposal states that the call would be handed off to the strongest compatible signal; and
- The proposal allegedly could be implemented at minimal cost.

New Analog Cellular Equipment

The Alliance's proposal unreasonably applies only to analog cellular service while not imposing the same burdens on any other CMRS services. Principles of regulatory parity, as required by Congress and applied by the Commission, require the Commission to deny the Alliance's proposal for singling out this one service.[3]

Reconsideration of Ameritech, Sept. 3, 1996, at 14 (suggesting that the E911 requirements could be contingent on carriers receiving indemnification from PSAPs).

[2] Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems (Memorandum Opinion and Order), FCC 97-402, para. 137, released Dec. 23, 1997.

[3] H.R. Rep. 103-213, 103rd Cong., 1st Sess. 494 (1993) (Conference Report) ("similarly services are accorded similar regulatory treatment"); e.g., Implementation of Sections 3(n) and 332 of the Communications Act (Second Report and Order), 9 FCC Rcd. 1411, 1418 (1994) (similar commercial mobile radio services must be accorded similar regulatory treatment); Implementation of Sections 3(n) and 332 of the Communications Act (Third Report and

In addition, it makes little sense to be adopting a proposal for analog service when that technology that is gradually being replaced by digital service.[4] In sum, the Commission should deny the Alliance's proposal because it places a disproportionate burden on the one CMRS service.

Signal Strength

The Alliance's proposal for switching carriers when the signal strength drops below -80 dBm is good in theory, but likely will be problematic in practice, for two reasons. First, if the analog cellular handset determines that the signal strength is below the threshold level and decides to switch to a second cellular system, there is no guarantee that the second cellular system will be able to transmit the call. The signal strength on the second cellular system may be too low for "good communication." Thus, the second system may drop the call.

In such situations, the end user would be unable to obtain prompt emergency service. As a result, the end user may attempt to hold the first cellular system liable for any consequential or

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Order), 9 FCC Rcd. 7988, 7996 (1994) (mobile services must be treated similarly if they compete against each other); see also McElroy Electronics Corp. v. FCC, 990 F.2d 1351, 1365 (D.C. Cir. 1993) ("we remind the Commission of the importance of treating similarly situated parties alike or providing an adequate justification for disparate treatment").

[4] Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993 (Third Report), FCC 98-91, at 30, released June 11, 1998 (stating that the combined coverage area of digital cellular service is equivalent to 71% of the nation's total population).

other damages. Because the Commission has not adopted liability limitations, the first carrier would need to defend itself on the merits of the complaint, and likely would need to prove that the first system did not drop or otherwise mishandle the call, but that the handset decided to switch to a second cellular system. To make this argument, the first carrier may need to determine -- for both cellular systems -- what the signal strength was at the location of the call, on the day and time of the call, given the weather conditions and other interference that may have been present, and given the exact path that the signal had taken. Carriers do not have this information. Thus, the first carrier may not be able to demonstrate why it did not carry the call and may face liability for a call that the analog cellular handset decided to transfer to another system.

Second, the proposed threshold of -80 dBm is measured on the carrier's control channel, and may not be a reliable predictor of the signal strength on a subsequently negotiated traffic channel. In some situations, the control channel signal may be weaker than -80 dBm and the traffic channel may be stronger than -80 dBm. Thus, a test based on the signal strength of the control channel appears arbitrary.

In addition, there is no guarantee that a signal strength above -80 dBm will result in "good communication" as defined in the Report by Trott Communications Group (Trott). Signals may readily experience much more than the 9 dBm loss estimated by Trott if the end user is in a building, driving a car, or lying

injured on the ground. The resulting signal level readily could be much less than the -95 dBm Trott recommends for "good communication" on interference-limited systems. Similar signal losses can be experienced in noise-limited systems.

In sum, signals above -80 dBm on the control channel will not always produce a usable signal on the traffic channel. The Alliance's proposal therefore adds significant risks that may be borne by the first cellular carrier without providing any limitation on that liability and without providing assurances that the end user will be better served.

Effects of "Strongest Signal" Proposal

The Alliance's proposal could have unintended side effects. For example, if an analog carrier knows that it has a weak signal in an area where the other analog cellular system has a stronger signal, the Alliance's proposal could have the inadvertent effect of discouraging the former carrier from improving its coverage because the other carrier with the stronger signal could pick up the 911 call. Also, directing all calls to the strongest signal in a multi-carrier environment could have the unintended effect of creating call congestion where it would not have occurred if calls were divided among carriers. The Alliance's proposal does not address these issues.

Manufacturing of Analog Cellular Handsets

Based on the Trott Report, the Alliance asserts that the cost of modifying the design of analog cellular handsets to provide this channel-switching functionality would be minimal. But this conclusion is based on the Trott Report's assertion that "most" of the manufacturers already test and display signal strength. The Trott Report does not provide any information about which manufacturers do test the signal, which do not, and what the cost would be for the latter group to modify their handset designs. Trott also does not provide any information about how many handsets are produced and sold by the manufacturers that do test signal strength and how many handsets are produced and sold by manufacturers that do not test signal strength. The Trott Report therefore does not quantify the economic feasibility of the Alliance's proposal.

The Trott Report also does not explain how the handset's decision on what system to use to transmit a call could affect the processing of non-911 calls. If the handset has to make some of these decisions about signal strength regardless of whether the call is to a 911 service, that decision making could slow down the processing of all calls. The Trott Report therefore does not quantify the effect of the Alliance's proposal on non-911 calls.

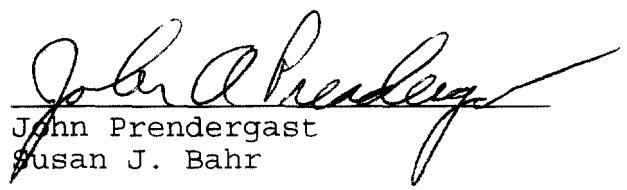
The Commission should not adopt the Alliance's proposal when the impact on cellular handset manufacturers and on standard call processing is unknown.

Conclusion

In sum, the Alliance's proposal unnecessarily and unreasonably increases the liability of analog cellular carriers while other CMRS providers would not be subject to such increased risk and while the Commission has not provided any immunity from such liability. The Alliance's proposal also does not provide any assurance that end users will be any better off with handsets that switch at the -80 dBm threshold. Furthermore, the Alliance fails to show that its proposal is economically feasible and that it would not increase call processing times for non-911 calls. For these reasons, Ameritech requests the Commission to deny the Alliance's proposal.

Respectfully submitted,

AMERITECH MOBILE COMMUNICATIONS, INC.

By 

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